

## Yield and nutritive quality of nine Napier grass varieties in Malaysia

### ABSTRACT

Napier grass was first introduced in Malaysia in the 1920s from East Africa and is currently the most popular fodder grass in dairy and feedlot production systems. Nine varieties of Napier grass were grown in a randomized complete block design with five replications to characterize and compare their growth, agronomic performance and nutritive quality. Based on the data obtained, six of the varieties could be grouped as the tall or medium height (>130 cm) varieties and three were short or dwarf types (<95cm). The shorter varieties had a higher ( $P<0.05$ ) overall nutritive quality (CP about 12%, ADF< 37%) compared to the taller varieties (CP 10%, ADF>37%) mainly because the former had a higher leaf-to-stem ratio (1.4 in dwarf and less than 0.8 in tall varieties,  $P<0.05$ ). On the other hand the tall varieties gave higher ( $P<0.05$ ) cumulative dry matter yield than the shorter varieties over a 12-month period with the tallest varieties giving more than 60 t/ha while the short varieties yielded less than 60 t/ha. Farmers who place a premium on yield would be advised to use the tall varieties while those with livestock that has special needs for higher quality feed such as for dairy production would benefit from using the dwarf Napier grass varieties.

**Keyword:** Napier grass; Varieties; Nutritive quality; Yield